

# CWT series

## Installation Guide

## Introduction

CWT speakers have been developed to provide synergy with Monitor Audio's other custom fit and home speakers. We apply our innovative design skills and experience in making high-end hi-fi and home theatre speakers to the custom fit environment providing un-rivalled performance and reliability.

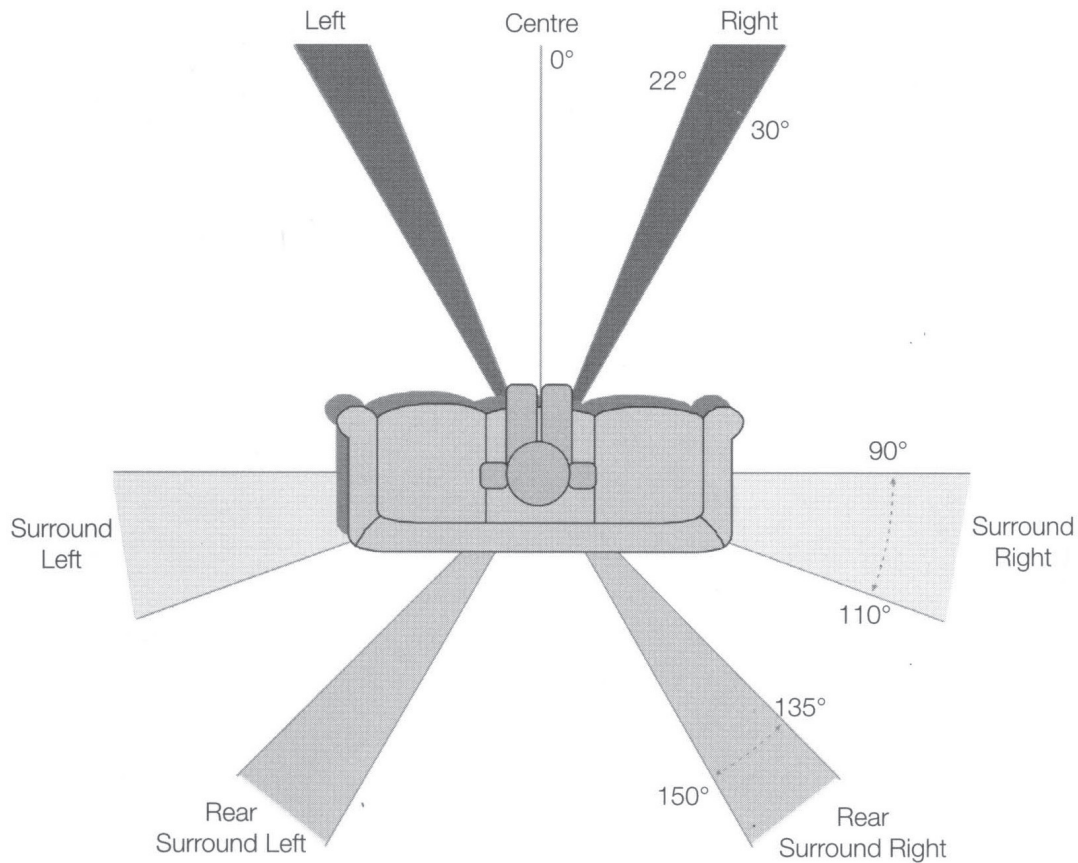
The new CWT series offer versatile installation options for both in-ceiling and in-wall applications. This high performance range of loudspeakers has been created to provide flexible installation in stealthy 'trim-less' round or square grilles styles. Featuring proven technologies and unique design features. CWT models combine high efficiency and wide frequency range to facilitate flexible system design across a wide range of demanding residential and commercial installations. The CWT 140, 160 & 180 bass drivers feature MMP® II cone technology coupled with Monitor Audio's trade mark C-CAM® gold dome tweeter. High frequency performance has been enhanced further by recent improvements to our C-CAM tweeter, taking the frequency band way past the limits of human hearing. The pivoting tweeter can be directed towards the listening space to provide ideal imaging and reduce un-wanted reflections when installed close to corners or wall boundaries. Simple crossover design implemented using high grade audiophile components to preserve the signal and provide a smooth yet detailed character.

All models have been designed to be less than 100mm (4") deep, which means both round and square grille styles can fit into a standard stud wall, or where mounting depth is restricted. By integrating the bass driver basket and frame, our engineers have managed to reduce the overall size by around 25% compared to its counterparts, whilst maintaining the same driver size and performance. Grilles are held in place magnetically by high power Neodymium magnets which provide simple installation and servicing. Since the sub structure for the units are identical, it's possible to change the grille styles from round to square (or vice-versa), should you so desire by simply removing the magnetic grille and replacing with a new one.

## Features Overview

- Three driver sizes - 4", 6" and 8"
- Round or Square grille options to suite wall or ceiling installations
- All models less than 100mm (4") deep to ensure fitting in restricted spaces are assured
- Tri-Grip - All models feature the unique Tri-Grip fixing design. This 3 -position 'dog' style fixing provides greater contact surface area than other types of fixings whilst saving important installer fitting time. The Tri-Grip dog fixings are made from a tough re-enforced polymer providing a secure fixing without the risk over-tightening
- MMP II cone technology
- C-CAM gold dome tweeter with pivoting of up to 15 degrees in all directions.
- Trim-less frame and low profile grille for installations where discreet aesthetic appearance is critical.
- All grilles are held in place with ultra-powerful Neodymium magnets for easy installation and servicing.
- Paint-able grille to allow perfect integration into the décor. An additional scrim material is provided to facilitate trouble free painting process.
- All models use fire retardant materials specified to U.L V0 rating.
- All models are splash and humidity proof for installation in shower room or pool areas.
- All models feature dust protection covers that are designed to prevent the ingress of loose building materials or dust into the driver and crossover network
- Dedicated pre-construction (rough-in kits) brackets (CB4, CB5 & CB6)
- Alignment marks to ensure the products are in correct alignment with each other.

## Optimum Speaker Positioning



## Fitting the CWT Series Speakers.

The same steps apply for both square and round products and when fixing to a wall or ceiling.



**CAUTION:** The CWT loudspeakers can only be fixed into plasterboard (dry-lined) or suspended ceilings/ walls upto 45mm (1 <sup>3</sup>/<sub>4</sub>") thick. For safety reasons, if you are unsure of your ability to provide a secure and safe fixing, do not attempt to fix these speakers, please obtain the services of a competent and qualified trades person.



**CAUTION:** Ensure that there are no water pipes or electricity cables running behind where the hole will be cut and the loudspeaker will be placed. Work from secure steps and avoid trailing wires.

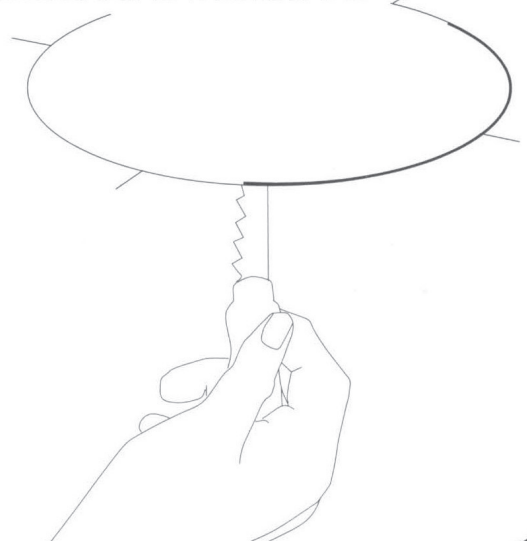
1

Draw around template and mark centre lines if necessary



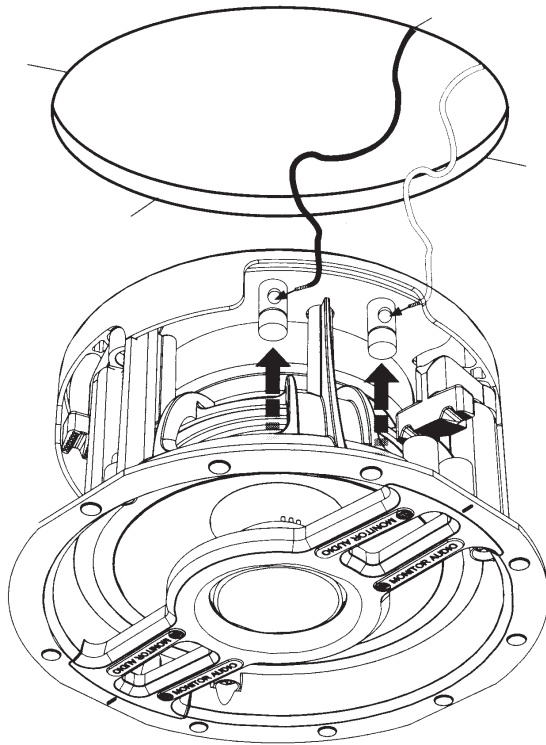
2

Cut around marked line



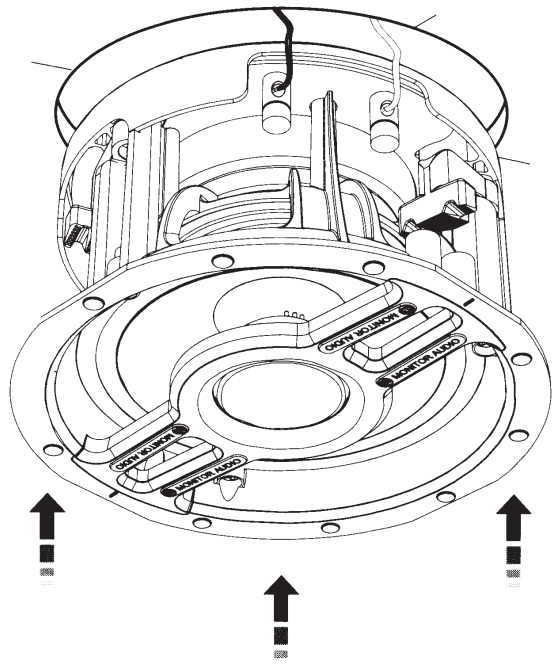
3

Connect speaker cables



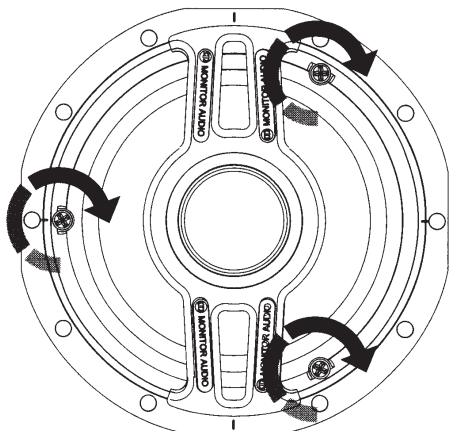
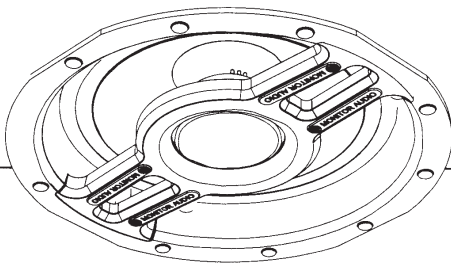
4

Guide speaker into cut out



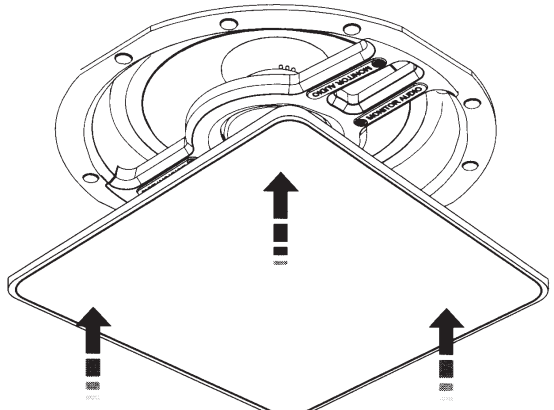
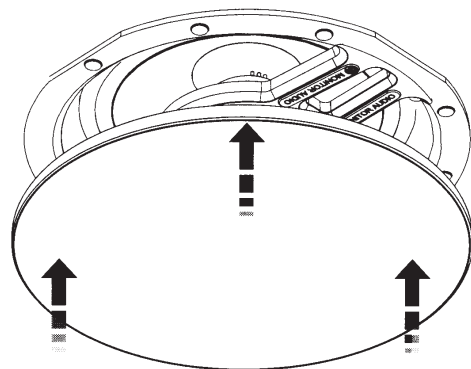
5

Tighten 3 Tri-Grip screws



6

Fit grilles. They are held in place magnetically and should 'snap' into place.





## Painting Grilles

The grilles can be painted. It is recommended that a spray paint is used. If this is not possible, use a paint brush in a dabbing/stippling technique rather than a conventional stroke. Also, do not over load the brush with paint, the grille holes will get clogged up.

Prior to painting, remove the inner scrim from the grille. A spare is supplied to replace this when the paint is dry.

## Specifications

Model	CWT 140 (R & S)	CWT 160 (R & S)	CWT180 (R & S)
Frequency Response	75Hz - 30kHz	60Hz - 30kHz	48Hz - 30kHz
Impedance (Nominal)	6 Ohms	6 Ohms	6 Ohms
Sensitivity (1W @ 1m)	85dB	88dB	90dB
Maximum SPL (Single unit in free space)	102.8dBA	107.2dBA	110.6dBA
Power Handling (RMS)	50W	70W	120W
Recommended Amp Requirements	10 - 50W	15 - 70W	30 - 120W
Drive Unit Complement	1 x 4" MMP®II Bass Driver 1 x 1" (25mm) Pivoting C-CAM® Gold Dome Tweeter	1 x 6" MMP®II Bass Driver 1 x 1" (25mm) Pivoting C-CAM® Gold Dome Tweeter	1 x 8" MMP®II Bass Driver 1 x 1" (25mm) Pivoting C-CAM® Gold Dome Tweeter
Acoustic Configuration	2 Way	2 Way	2 Way
Overall Size	Round: 180.2mm (7 1/8") Square: 176.7 x 176.7mm (6 15/16 x 6 15/16")	Round: 204.2mm (8 1/16") Square: 199.2 x 199.2mm (7 13/16 x 7 13/16")	Round: 251.7mm (9 15/16") Square: 246.7 x 246.7mm (9 11/16 x 9 11/16")
Overall Depth	103.4mm (4 1/16")	102.8mm (4 1/16")	103.3 (4 1/16")
Out Out Hole Diameter	149mm (5 7/8")	170mm (6 11/16")	213mm (8 3/8")
Mounting Depth	98.6mm (3 7/8")	99mm (3 7/8")	99.4mm (3 15/16")
Fixing Type	3 Position 'Tri Grip®' dog fixings	3 Position 'Tri Grip®' dog fixings	3 Position 'Tri Grip®' dog fixings
Cable Connection	Gold plated 'push' type terminals	Gold plated 'push' type terminals	Gold plated 'push' type terminals
Construction Material	Mineral filled ABS (UL94-V0 rated, RoHS compliant)	Mineral filled ABS (UL94-V0 rated, RoHS compliant)	Mineral filled ABS (UL94-V0 rated, RoHS compliant)
Weight	1.18Kg (2.6lb)	2.1Kg (4.6lb)	2.72Kg (6lb)
Pre-Construction Bracket	CB4 (Pink)	CB5 (Blue)	CB6 (Purple)



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Designed in the United Kingdom



# CWT140

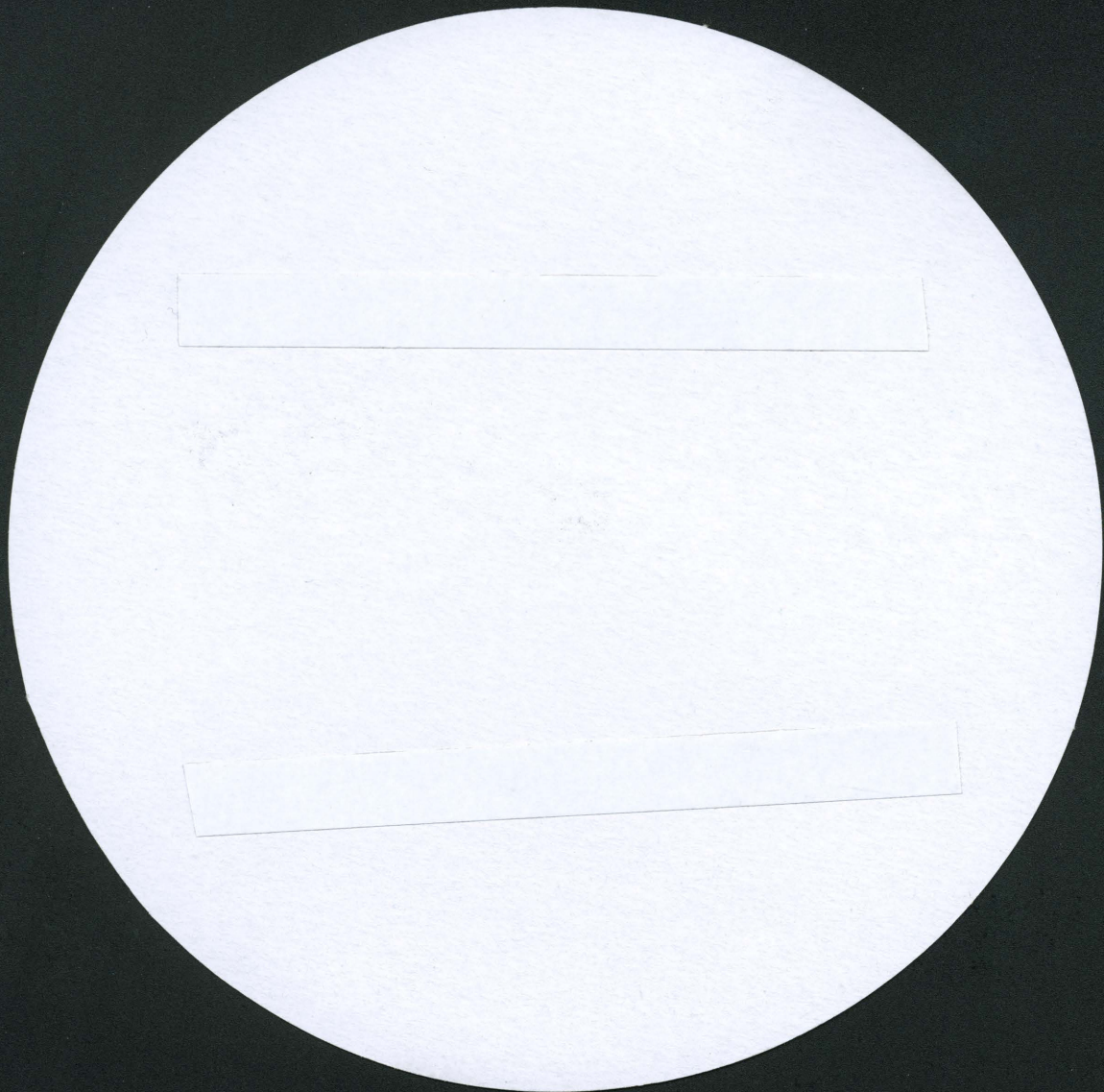
cut out template

Diameter: 149mm (5 7/8")

**How to use this template:**

- 1) Remove the Protective backing from the "low tack" adhesive tape on rear of this template.
- 2) Align centre lines.
- 3) The outside profile is an accurate indication of the speaker box hole required.
- 4) Draw around the profile, remove template and cut hole.
- 5) The template can be repositioned a number of times if required.









## IMPORTANT SAFETY INSTRUCTIONS



GB - SAFETY INSTRUCTIONS

FR - CONSIGNES DE SÉCURITÉ

IT - ISTRUZIONI PER LA SICUREZZA

DE - SICHERHEITSANWEISUNGEN

ES - INSTRUCCIONES DE SEGURIDAD

PT - INSTRUÇÕES DE SEGURANÇA

NL - VEILIGHEIDSINSTRUCTIES



CH - 安全説明

RU - ИНСТРУКЦИИ ПО ТЕХНИКЕ БЕЗОПАСНОСТИ

RU - УСЛОВИЯ ГАРАНТИИ

SPEAKERS

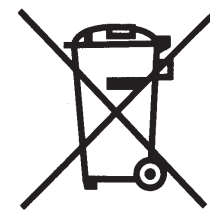
## IMPORTANT SAFETY INSTRUCTIONS

- 1. Please read these instructions.**
- 2. Please keep these instructions.**
- 3. Heed all warnings.**
- 4. Follow all instructions.**
- 5. Do not use this apparatus with water.**
- 6. Clean only with a dry cloth.** Great care and attention has gone into the materials chosen to produce your Monitor Audio loudspeakers. A gentle wipe with a dry, clean cloth is all that is required to remove any dust. Treat them as you would a fine piece of furniture because that is how they have been designed. To clean the high gloss finishes use our "Lacquer Polish" that has been developed alongside Auto Glym. It can only be purchased from the online shop at [www.monitoraudio.com](http://www.monitoraudio.com) (UK customers only).
- 7. Do not install near any heat source**, such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- 8. Only use attachments/ accessories specified by Monitor Audio.**
- 9. Use only with the cart**, stand, tripod, bracket, or table specified by monitor Audio or sold with the apparatus. When a cart is used, use caution when moving the cart/ apparatus combination to avoid injury from tip-over. 
- 10. Refer all servicing to qualified service personnel.** Servicing is required when the apparatus has been damaged in any way, such as power supply cord or plug is damaged, liquid has been spilled or objects have fallen onto the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally or has been dropped.
- 11. This apparatus shall not be exposed to dripping or splashing water** and that no object filled with liquids such as vases shall be placed on the apparatus.
- 12. This exclamation point within an equilateral triangle** is intended to alert the user to the presence of important maintenance (servicing) instructions in the literature accompanying the appliance. 
- 13. No naked flame sources**, such as lighted candles, should be placed on the apparatus.

## RE-CYCLING

Correct Disposal of Waste Electrical and Electronic Equipment (WEEE) by User in Private Households in the EU.

This symbol on the product or accessories indicates that they must not be disposed of with your household wastes throughout the EU. To prevent possible harm to the environment or human health from uncontrolled waste disposal, recycle it responsibly to promote the sustainable reuse of material resources. Instead it is your responsibility to dispose of your waste equipment by handing it over to a designated WEEE collection point for recycling. The separate collection and recycling of your waste equipment will help conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment.



For more specific information about where you can take your equipment for recycling please contact your local city/council office, your local waste disposal service or the outlet where you purchased your Monitor Audio product.

## ROHS DECLARATION OF CONFORMITY

Directive 2011/65/EU of the European Parliament and of the Council on the reduction of the use of certain hazardous substances in electrical and electronic equipment, June 2011.



## Background

The RoHS directive restricts the use of Lead (Pb), Cadmium (Cd), Mercury (Hg), hexavalent Chromium (CrVI), polybrominated biphenyl (PBB) compounds, and polybrominated diphenyl ether (PBDE) compounds in electrical and electronic equipment sold in the European Union.

## GUARANTEE AND SERVICE

To validate your warranty please visit [www.monitoraudio.com](http://www.monitoraudio.com) within 30 days of purchase.

When you register online you'll gain free entry to our monthly prize draw! What's more you'll be the first to hear about the great things happening at Monitor Audio, including new products and events!

This equipment has been fully tested prior to dispatch from the factory. Both the craftsmanship and the performance of this product is guaranteed against manufacturing defects for the period of **five years** from the date of purchase (see conditions below), provided that the product was supplied by an authorised Monitor Audio retailer under the consumer sale agreement. (The words 'consumer sale' shall be construed in accordance with section 15 of the supply of goods act 1973). Monitor Audio accepts no responsibility for defects arising from accident, misuse, abuse, wear and tear, modification or operation outside of that specified within this instruction manual. Neither will responsibility be accepted for damage or loss occurring during transit to or from the parties claiming under this guarantee.

This guarantee covers both labour and parts. The liability of Monitor Audio is limited to the cost of repair or replacement of the defective parts (at the discretion of Monitor Audio) and under no circumstances extends to consequential losses or damage.

## CLAIMS UNDER THIS GUARANTEE

The equipment should be returned in its original packaging to the original supplier where possible, or to any other authorised Monitor Audio dealer. If it is not possible to return the equipment by hand, then it should be sent carriage prepaid via a reputable carrier. If the original packing is not available replacement packaging can be purchased from Monitor Audio.

If you have any difficulties complying with these requirements please contact us at the following address:

Customer Service  
Monitor Audio Ltd.  
24 Brook Road  
Rayleigh  
Essex, SS6 7XJ  
England

Tel: +44 (0)1268 740580  
Fax: +44 (0)1268 740589  
Internet: [www.monitoraudio.com](http://www.monitoraudio.com)  
Email: [info@monitoraudio.co.uk](mailto:info@monitoraudio.co.uk)

This guarantee does not affect the statutory rights of the consumer under UK law.

## DATA PROTECTION

We at Monitor Audio are committed to respecting the wishes and privacy of our customers. Any information you provide will be held in the strictest confidence and only used within the Monitor Audio organisation for the provision of services such as warranty claims or spare parts.

We may wish to contact you in the future to ensure you are happy with the products and standards of service we provide and to keep you up-to-date with the latest products and promotions we have to offer.

Should you wish not to be contacted by us either by post, e-mail or phone, please tick the box on the warranty form on the web site. Alternatively you can request not to be contacted in future by writing to Customer Service, at the address above.



## EC Declaration of Conformity

We, Monitor Audio Ltd.  
24 Brook Road  
Rayleigh  
Essex  
SS6 7XJ  
England



Declare in own responsibility, that the Monitor Audio products described in this manual is in compliance with Technical Standards/ Council Directives:

### **(LVD) 2006/95/EC Low Voltage Directive**

**EN60065: 2002+A1:** 2006 Safety requirements for mains operated electronic and related apparatus for household and similar use.

### **(EMC) 89/336/EEC Electro Magnetic Compatibility**

**EN55013: 08.90+A12:08.94+A13:12.96** Limits and methods of measurement of radio disturbance characteristics of broadcast receivers and associated equipment.

**EN55020: 12.94+A11:12.96** Electro magnetic immunity of broadcast receivers and associated equipment.

**EN61000-3-2: 04.95+A1:1998+A2:1998** Electro magnetic compatibility (EMC) – Part 3: Limits – Section 2: Limits for harmonic current emissions (equipment input current up to and including 16 Ampere per phase).

**EN6100-3-3: 01.95** Electro magnetic compatibility (EMC) – Part 3: Limits – Section 3: Limits of voltage fluctuations and flicker in low-voltage supply systems for equipment with rated current up and including 16 Ampere per phase.

**Signed by:**

A handwritten signature in black ink, appearing to be 'D.S. Hartley'.

**Name:** D.S. Hartley

**Position:** Technical Director

**Company:** Monitor Audio Ltd



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Designed in the United Kingdom

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